

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,459	11/24/2003	Eric W. Triplett	WIS4987P0321US	4079
32116 WOOD, PHILI	7590 05/14/200 LIPS, KATZ, CLARK	EXAMINER		
500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			MARX, IRENE	
			ART UNIT	PAPER NUMBER
·	•		1651	
		·		
			· MAIL DATE	DELIVERY MODE
			05/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		. 10/720,459	TRIPLETT ET AL.		
		Examiner	Art Unit		
		Irene Marx	1651		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAINS on sof time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a reply will apply and will expire SIX (6) MONTHS, cause the application to become ABANI	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).		
Status					
-	Responsive to communication(s) filed on <u>11 April 2007</u> .				
·	This action is FINAL . 2b) ☐ This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) <u>1,4, 5 and 13</u> is/are pending in the ap 4a) Of the above claim(s) <u>13</u> is/are withdrawn for Claim(s) is/are allowed. Claim(s) <u>1,4 and 5</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	rom consideration.			
Applicat	ion Papers				
· ·	The specification is objected to by the Examine				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority (under 35 U.S.C. § 119				
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priorical application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Appl ity documents have been red i (PCT Rule 17.2(a)).	lication No ceived in this National Stage		
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)		mary (PTO-413) lail Date mal Patent Application		
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Information Notice Notice	mai ratent Application		

Art Unit: 1651

DETAILED ACTION

The amendment filed 4/11/07 is acknowledged.

Claims 1, 4 and 5 are being considered on the merits. Claim 13 is withdrawn from consideration as directed to a non-elected invention.

To clarify the purpose of the inoculum in claim 1, it is recommended that the purpose of "the amount effective" be set forth.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4, 5 are rejected under 35 U.S.C. 102(a) as being anticipated by Riggs et al. (II) (2000).

The claims are directed to an inoculum of K. pneumoniae for plants or for cereal plants.

The reference discloses an inoculum of *K. pneumoniae* suitable for plants, specifically for cereal plants. (see, e.g., respective Abstracts).

Response to Arguments

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

The date of the paper abstracted in the meeting has not been established as being on or after December 4, 2000 with objective evidence.

Art Unit: 1651

Therefore the rejection is deemed proper and it is adhered to.

Claims 1, and 4-5 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Remus *et al.*

The claims are drawn to a *K. pneumoniae* strain which is suitable as an inoculum for plants.

The cited reference discloses a *K. pneumoniae* strain which is suitable as an inoculum for plants and which appears to be identical to the presently claimed strain (see, e.g., page 553) since it has substantially the same properties. The referenced microorganism appears to be identical to the presently claimed strain and is considered to anticipate the claimed microorganism it is suitable as an inoculum for plants to enhance growth, for example. The reference as a whole is directed to plant-growth promotion by *K. pneumoniae* strains. Consequently, the claimed strain appears to be anticipated by the reference.

In the alternative, even if the claimed microorganism is not identical to the referenced microorganism with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Response to Arguments

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

The recitation of distinct ATCC numbers does not distinguish an invention, since any individual may buy a strain at the ATCC and redeposit it under a fresh number.

Inasmuch as the properties at least of the mutants claimed does not include stimulation of root growth in any and all plants, the arguments regarding Remus fail to persuade. Applicant has not presented evidence to demonstrate that the strains are, in fact, different.

The Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether or not applicants' cultured strains differ and, if so, to what extent, from the

Art Unit: 1651

strains discussed in the references. Accordingly, inasmuch as the examiner has established that the prior art strain, which is of the same species *K. pneumoniae* as that claimed, likewise shares the property of at least being able to colonize grains and promote plant growth, she has reasonably demonstrated a reasonable likelihood/possibility that the compared strains are either identical or sufficiently similar that whatever differences exist are not patentably significant. Therefore, the burden of establishing non-obviousness by objective evidence shifted to Applicants. Applicants have not met that burden.

Claims 1, and 4-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haahtela *et al.* (1988 Effects of inoculation of Poa pratensis and Triticum aestivum with root-associated, N2-fixing Klebsiella, Enterobacter and Azospirillum. Plant and Soil 106, 239-248.)

The claims are drawn to a *K. pneumoniae* strain which is suitable as an inoculum for plants.

The cited reference discloses a *K. pneumoniae* strain which is suitable as an inoculum for plants and which appears to be identical to the presently claimed strain ((See, e.g., page 240, col. 1) since it has substantially the same properties. The referenced microorganism appears to be identical to the presently claimed strain and is considered to anticipate the claimed microorganism it is suitable as an inoculum for plants to enhance growth, for example. Consequently, the claimed strain appears to be anticipated by the reference.

In the alternative, even if the claimed microorganism is not identical to the referenced microorganism with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced microorganism is likely to inherently possess the same characteristics of the claimed microorganism particularly in view of the similar characteristics which they have been shown to share. Thus the claimed strain would have been obvious to those skilled in the art within the meaning of USC 103.

Art Unit: 1651

Response to Arguments

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

The recitation of distinct ATCC numbers does not distinguish an invention, since any individual may buy a strain at the ATCC and redeposit it under a fresh number.

The Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether or not applicants' cultured strains differ and, if so, to what extent, from the strains discussed in the references. Accordingly, inasmuch as the examiner has established that the prior art strain, which is of the same species *K. pneumoniae* as that claimed, likewise shares the property of at least being able to colonize grains and promote plant growth, she has reasonably demonstrated a reasonable likelihood/possibility that the compared strains are either identical or sufficiently similar that whatever differences exist are not patentably significant. Therefore, the burden of establishing non-obviousness by objective evidence shifted to Applicants. Applicants have not met that burden.

The rejection under 35 U.S.C 103 over Lee *et al.* is withdrawn in view of applicant's arguments regarding differences in the strain as far as nif-deficiency is concerned..

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/720,459 Page 6

Art Unit: 1651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (571) 272-0919. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irene Marx Primary Examiner

Sure mark

Art Unit 1651